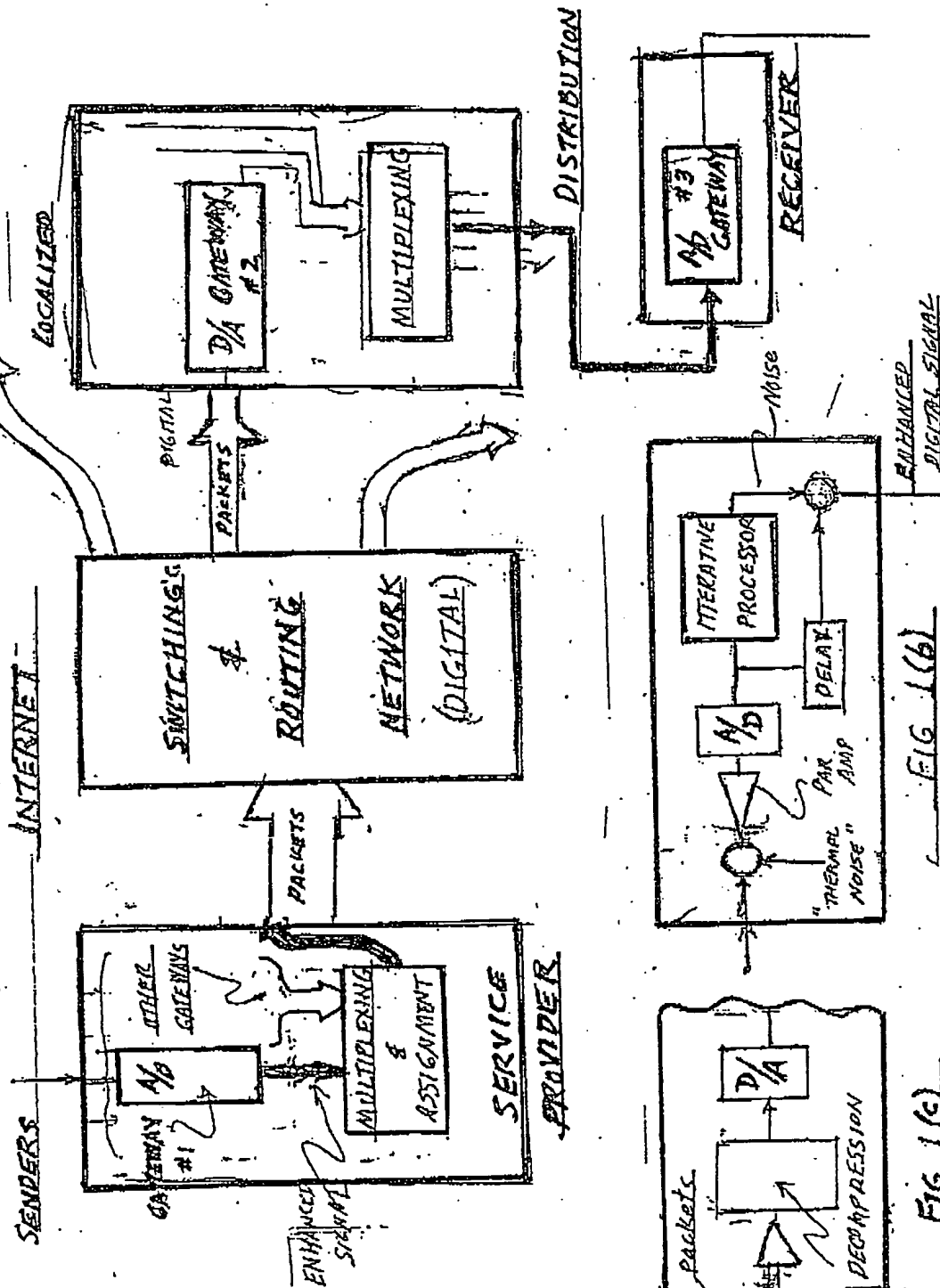


FIG 1 (a) ENHANCEMENT OPPORTUNITIES



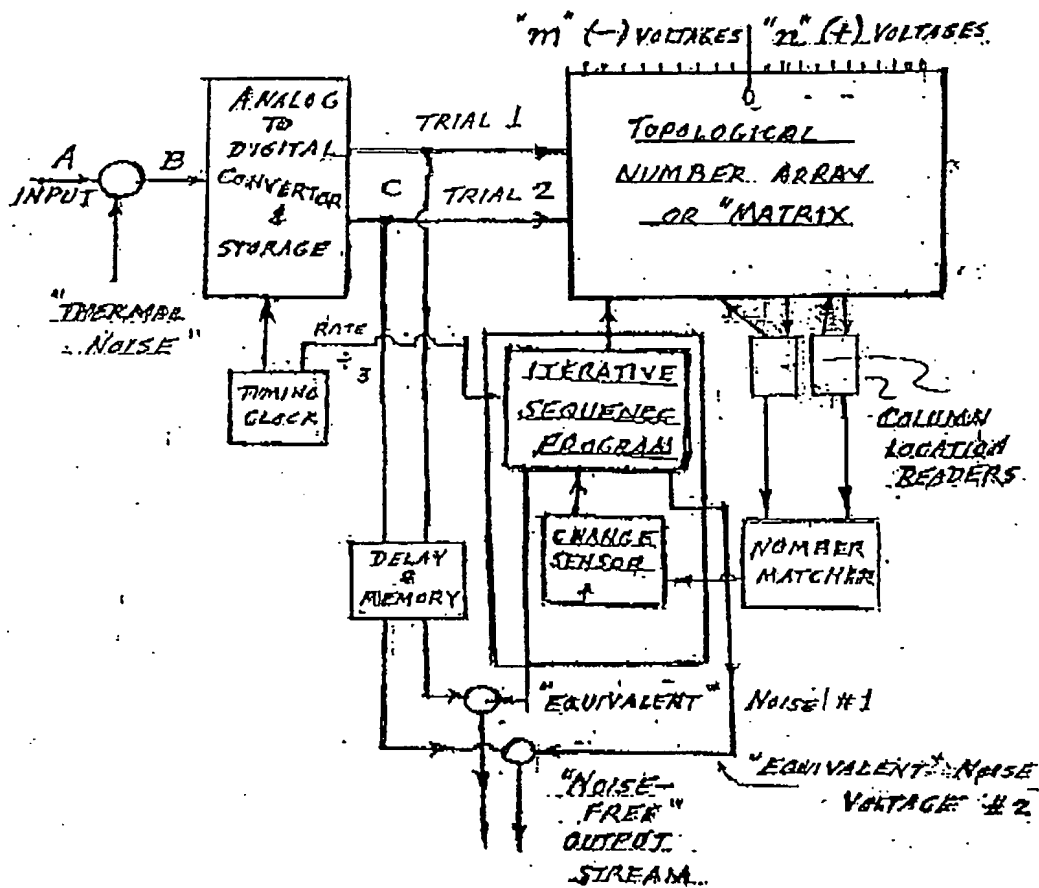


FIG 2 BLOCK DIAGRAM

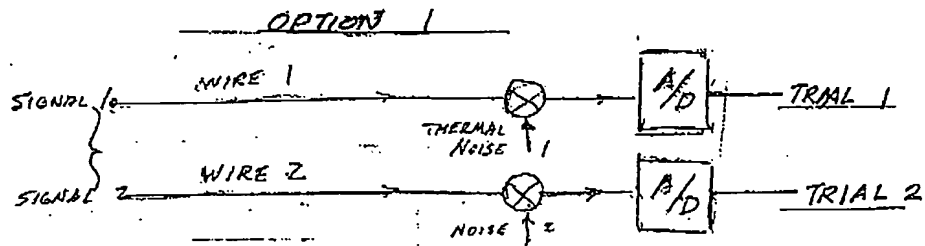


FIG 3 (a) 2-WIRE (SAME SIGNAL - 2 NOISES)

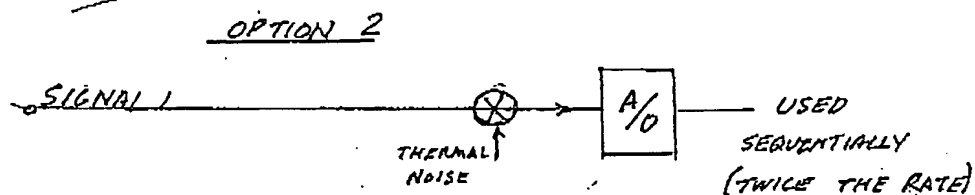


FIG 3 (b) 1-WIRE SEQUENTIALLY SACRIFICES 3 db

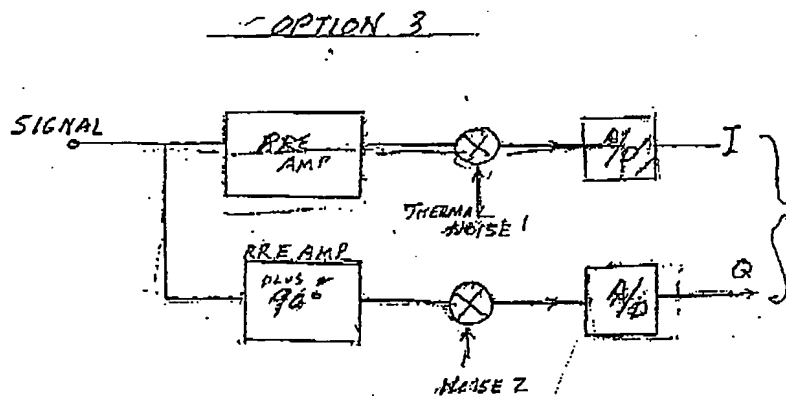


FIG 3 (c) 1-WIRE USING IN PHASE I AND QUADRATURE Q

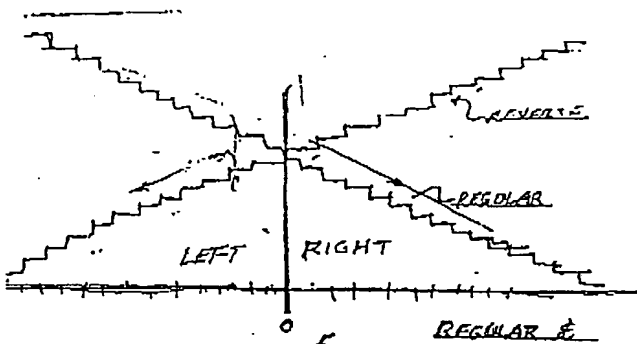
FIG 3 CONNECTION OPTIONS

I data === Group 1 838 No. 123 averages 838 111 days scanned in opposite sense 111

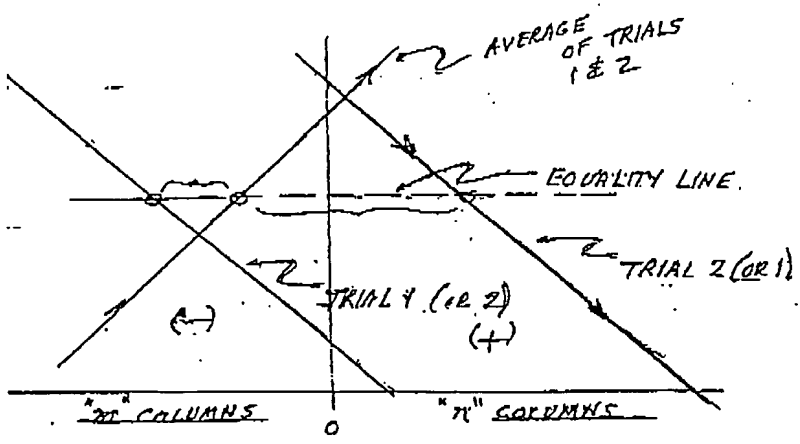
Bin 1A	-1.7	-1.6	-1.5	-1.4	-1.3	-1.2	-1.1	-1.0	-0.9	-0.8	-0.7	-0.6	-0.5	-0.4	-0.3	-0.2	-0.1	0	0.1	0.2	0.3	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.2	1.3	1.4	1.5	1.6	1.7
Avg	1.204	1.184	1.164	1.144	1.124	1.104	1.084	1.064	1.044	1.024	1.004	0.984	0.964	0.944	0.924	0.904	0.884	0.864	0.844	0.824	0.804	0.784	0.764	0.744	0.724	0.704	0.684	0.664	0.644	0.624	0.604	0.584	0.564	0.544	0.524
268	0.041	-0.552	-0.502	-0.452	-0.402	-0.352	-0.302	-0.252	-0.202	-0.152	-0.102	-0.052	-0.002	-0.048	-0.092	-0.136	-0.180	-0.224	-0.268	-0.312	-0.356	-0.400	-0.444	-0.488	-0.532	-0.576	-0.620	-0.664	-0.708	-0.752	-0.796	-0.840	-0.884	-0.928	-0.972
Avg	-0.631	0.541	0.591	0.641	0.691	0.741	0.791	0.841	0.891	0.941	0.991	1.041	1.091	1.141	1.191	1.241	1.291	1.341	1.391	1.441	1.491	1.541	1.591	1.641	1.691	1.741	1.791	1.841	1.891	1.941	1.991	2.041	2.091	2.141	2.191
21A	-0.052	-1.151	-1.111	-1.061	-1.011	-0.961	-0.911	-0.861	-0.811	-0.761	-0.711	-0.661	-0.611	-0.561	-0.511	-0.461	-0.411	-0.361	-0.311	-0.261	-0.211	-0.161	-0.111	-0.061	-0.011	0.039	0.089	0.139	0.189	0.239	0.289	0.339	0.389	0.439	0.489
Avg	0.735	0.625	0.635	0.585	0.535	0.485	0.435	0.385	0.335	0.285	0.235	0.185	0.135	0.085	0.035	-0.015	-0.065	-0.115	-0.165	-0.215	-0.265	-0.315	-0.365	-0.415	-0.465	-0.515	-0.565	-0.615	-0.665	-0.715	-0.765	-0.815	-0.865	-0.915	
22A	0.040	-1.005	-0.955	-0.905	-0.855	-0.805	-0.755	-0.705	-0.655	-0.605	-0.555	-0.505	-0.455	-0.405	-0.355	-0.305	-0.255	-0.205	-0.155	-0.105	-0.055	-0.005	0.045	0.095	0.145	0.195	0.245	0.295	0.345	0.395	0.445	0.495	0.545	0.595	
Avg	0.654	0.604	0.554	0.504	0.454	0.404	0.354	0.304	0.254	0.204	0.154	0.104	0.054	0.004	-0.046	-0.096	-0.146	-0.196	-0.246	-0.296	-0.346	-0.396	-0.446	-0.496	-0.546	-0.596	-0.646	-0.696	-0.746	-0.796	-0.846	-0.896	-0.946	-0.996	
23A	0.022	-1.124	-1.074	-1.024	-0.974	-0.924	-0.874	-0.824	-0.774	-0.724	-0.674	-0.624	-0.574	-0.524	-0.474	-0.424	-0.374	-0.324	-0.274	-0.224	-0.174	-0.124	-0.074	-0.024	0.026	0.076	0.126	0.176	0.226	0.276	0.326	0.376	0.426	0.476	0.526
Avg	1.154	1.114	1.064	1.014	0.964	0.914	0.864	0.814	0.764	0.714	0.664	0.614	0.564	0.514	0.464	0.414	0.364	0.314	0.264	0.214	0.164	0.114	0.064	0.014	-0.036	-0.086	-0.136	-0.186	-0.236	-0.286	-0.336	-0.386	-0.436	-0.486	
24A	-0.002	-0.637	-0.587	-0.537	-0.487	-0.437	-0.387	-0.337	-0.287	-0.237	-0.187	-0.137	-0.087	-0.037	0.013	0.063	0.113	0.163	0.213	0.263	0.313	0.363	0.413	0.463	0.513	0.563	0.613	0.663	0.713	0.763	0.813	0.863	0.913	0.963	
Avg	1.100	1.050	1.000	0.950	0.900	0.850	0.800	0.750	0.700	0.650	0.600	0.550	0.500	0.450	0.400	0.350	0.300	0.250	0.200	0.150	0.100	0.050	0.000	-0.050	-0.100	-0.150	-0.200	-0.250	-0.300	-0.350	-0.400	-0.450	-0.500	-0.550	
25A	-0.022	-0.732	-0.682	-0.632	-0.582	-0.532	-0.482	-0.432	-0.382	-0.332	-0.282	-0.232	-0.182	-0.132	-0.082	-0.032	0.018	0.068	0.118	0.168	0.218	0.268	0.318	0.368	0.418	0.468	0.518	0.568	0.618	0.668	0.718	0.768	0.818	0.868	
Avg	0.467	0.437	0.387	0.337	0.287	0.237	0.187	0.137	0.087	0.037	-0.013	-0.063	-0.113	-0.163	-0.213	-0.263	-0.313	-0.363	-0.413	-0.463	-0.513	-0.563	-0.613	-0.663	-0.713	-0.763	-0.813	-0.863	-0.913	-0.963	-1.013	-1.063	-1.113		
26B	-0.163	-1.461	-1.431	-1.381	-1.331	-1.281	-1.231	-1.181	-1.131	-1.081	-1.031	-0.981	-0.931	-0.881	-0.831	-0.781	-0.731	-0.681	-0.631	-0.581	-0.531	-0.481	-0.431	-0.381	-0.331	-0.281	-0.231	-0.181	-0.131	-0.081	-0.031	0.019	0.069	0.119	
Avg	0.924	0.874	0.824	0.774	0.724	0.674	0.624	0.574	0.524	0.474	0.424	0.374	0.324	0.274	0.224	0.174	0.124	0.074	0.024	-0.026	-0.076	-0.126	-0.176	-0.226	-0.276	-0.326	-0.376	-0.426	-0.476	-0.526	-0.576	-0.626	-0.676		
27A	-0.120	-0.754	-0.704	-0.654	-0.604	-0.554	-0.504	-0.454	-0.404	-0.354	-0.304	-0.254	-0.204	-0.154	-0.104	-0.054	0.004	0.054	0.104	0.154	0.204	0.254	0.304	0.354	0.404	0.454	0.504	0.554	0.604	0.654	0.704	0.754	0.804	0.854	
Avg	0.782	0.732	0.682	0.632	0.582	0.532	0.482	0.432	0.382	0.332	0.282	0.232	0.182	0.132	0.082	0.032	-0.018	-0.068	-0.118	-0.168	-0.218	-0.268	-0.318	-0.368	-0.418	-0.468	-0.518	-0.568	-0.618	-0.668	-0.718	-0.768	-0.818		
28C	-0.175	-0.840	-0.790	-0.740	-0.690	-0.640	-0.590	-0.540	-0.490	-0.440	-0.390	-0.340	-0.290	-0.240	-0.190	-0.140	-0.090	-0.040	0.010	0.060	0.110	0.160	0.210	0.260	0.310	0.360	0.410	0.460	0.510	0.560	0.610	0.660	0.710		
Avg	1.245	1.195	1.145	1.095	1.045	0.995	0.945	0.895	0.845	0.795	0.745	0.695	0.645	0.595	0.545	0.495	0.445	0.395	0.345	0.295	0.245	0.195	0.145	0.095	0.045	-0.005	-0.055	-0.105	-0.155	-0.205	-0.255	-0.305	-0.355	-0.405	
29C	-0.129	-0.583	-0.533	-0.483	-0.433	-0.383	-0.333	-0.283	-0.233	-0.183	-0.133	-0.083	-0.033	0.017	0.067	0.117	0.167	0.217	0.267	0.317	0.367	0.417	0.467	0.517	0.567	0.617	0.667	0.717	0.767	0.817	0.867	0.917	0.967		
Avg	0.848	0.798	0.748	0.698	0.648	0.598	0.548	0.498	0.448	0.398	0.348	0.298	0.248	0.198	0.148	0.098	0.048	-0.002	-0.052	-0.102	-0.152	-0.202	-0.252	-0.302	-0.352	-0.402	-0.452	-0.502	-0.552	-0.602	-0.652	-0.702			
30B	0.032	-0.921	-0.871	-0.821	-0.771	-0.721	-0.671	-0.621	-0.571	-0.521	-0.471	-0.421	-0.371	-0.321	-0.271	-0.221	-0.171	-0.121	-0.071	-0.021	0.029	0.079	0.129	0.179	0.229	0.279	0.329	0.379	0.429	0.479	0.529	0.579	0.629	0.679	
Avg	0.786	0.736	0.686	0.636	0.586	0.536	0.486	0.436	0.386	0.336	0.286	0.236	0.186	0.136	0.086	0.036	-0.014	-0.064	-0.114	-0.164	-0.214	-0.264	-0.314	-0.364	-0.414	-0.464	-0.514	-0.564	-0.614	-0.664	-0.714	-0.764			
31C	-0.124	-1.187	-1.137	-1.087	-1.037	-0.987	-0.937	-0.887	-0.837	-0.787	-0.737	-0.687	-0.637	-0.587	-0.537	-0.487	-0.437	-0.387	-0.337	-0.287	-0.237	-0.187	-0.137	-0.087	-0.037	0.013	0.063	0.113	0.163	0.213	0.263	0.313	0.363	0.413	
Avg	1.050	1.010	0.960	0.910	0.860	0.810	0.760	0.710	0.660	0.610	0.560	0.510	0.460	0.410	0.360	0.310	0.260	0.210	0.160	0.110	0.060	0.010	-0.040	-0.090	-0.140	-0.190	-0.240	-0.290	-0.340	-0.390	-0.440	-0.490	-0.540		
32C	-0.015	-0.755	-0.705	-0.655	-0.605	-0.555	-0.505	-0.455	-0.405	-0.355	-0.305	-0.255	-0.205	-0.155	-0.105	-0.055	0.005	0.055	0.105	0.155	0.205	0.255	0.305	0.355	0.405	0.455	0.505	0.555	0.605	0.655	0.705	0.755	0.805		
Avg	0.393	0.343	0.293	0.243	0.193	0.143	0.093	0.043	-0.007	-0.057	-0.107	-0.157	-0.207	-0.257	-0.307	-0.357	-0.407	-0.457	-0.507	-0.557	-0.607	-0.657	-0.707	-0.757	-0.807	-0.857	-0.907	-0.957	-1.007	-1.057	-1.107	-1.157	-1.207		
33C	-0.050	-0.687	-0.637	-0.587	-0.537	-0.487	-0.437	-0.387	-0.337	-0.287	-0.237	-0.187	-0.137	-0.087	-0.037	0.013	0.063	0.113	0.163	0.213	0.263	0.313	0.363	0.413	0.463	0.513	0.563	0.613	0.663	0.713	0.763	0.813	0.863		
Avg	0.510	0.460	0.410	0.360	0.310	0.260	0.210	0.160	0.110	0.060	0.010	-0.040	-0.090	-0.140	-0.190	-0.240	-0.290	-0.340	-0.390	-0.440	-0.490	-0.540	-0.590	-0.640	-0.690	-0.740	-0.790	-0.840	-0.890	-0.940	-0.990	-1.040	-1.090		
34A	-0.202	-1.479	-1.429	-1.379	-1.329	-1.279	-1.229	-1.179	-1.129	-1.079	-1.029	-0.979	-0.929	-0.879	-0.829	-0.779	-0.729	-0.679	-0.629	-0.579	-0.529	-0.479	-0.429	-0.379	-0.329	-0.279	-0.229	-0.179	-0.129	-0.079	-0.029	0.021	0.071	0.121	
Avg	1.075	0.965	0.915	0.865	0.815	0.765	0.715	0.665	0.615	0.565	0.515	0.465	0.415	0.365	0.315	0.265	0.215	0.165	0.115	0.065	0.015	-0.035	-0.085	-0.135	-0.185	-0.235	-0.285	-0.335	-0.385	-0.435	-0.485	-0.535	-0.585		
35C	-0.083	-0.548	-0.498	-0.448	-0.398	-0.348	-0.298	-0.248	-0.198	-0.148	-0.098	-0.048	0.002	0.052	0.102	0.152	0.202	0.252	0.302	0.352	0.402	0.452	0.502	0.552	0.602	0.652	0.702	0.752	0.802	0.852	0.902	0.952	1.002		
Avg	1.171	1.121	1.071	1.021	0.971	0.921	0.871	0.821	0.771	0.721	0.671	0.621	0.571	0.521	0.471	0.421	0.371	0.321	0.271	0.221	0.171	0.121	0.071	0.021	-0.029	-0.079	-0.129	-0.179	-0.229	-0.279	-0.329	-0.379	-0.429		
36B	-0.217	-0.841	-0.791	-0.741	-0.691	-0.641	-0.591	-0.541	-0.491	-0.441	-0.391	-0.341	-0.291	-0.241	-0.191	-0.141	-0.091	-0.041	0.009	0.059	0.109	0.159	0.209	0.259	0.309	0.359	0.409	0.459	0.509	0.559	0.609	0.659	0.709		
Avg	1.024	0.974	0.924	0.874	0.824	0.774	0.724	0.674	0.624	0.574	0.524																								

[illegible]

FIG 4(b)



5
FIG (a) REVERSE SCANS



4 (b) COLUMN LOCATION

FIG 5 SCANNING "SENSE" REQUIREMENTS

I data ----		Average I values										Avg scanned in opposite sense									
Mie 1A -0.9 v -0.85 v -0.8 v -0.75 v -0.7 v -0.65 v -0.6 v -0.55 v -0.5 v -0.45 v -0.4 v -0.35 v -0.3 v -0.25 v -0.2 v -0.15 v -0.1 v																					
Avg		2.431	2.381	2.331	2.281	2.231	2.181	2.131	2.081	2.031	1.981	1.931	1.881	1.831	1.781	1.731	1.681	1.631	1.581	1.531	
20B	0.041	0.672	0.722	0.772	0.822	0.872	0.922	0.972	1.022	1.072	1.122	1.172	1.222	1.272	1.322	1.372	1.422	1.472	1.522	1.572	
Avg		1.916	1.866	1.816	1.766	1.716	1.666	1.616	1.566	1.516	1.466	1.416	1.366	1.316	1.266	1.216	1.166	1.116	1.066	1.016	
21A	-0.052	0.064	0.114	0.164	0.214	0.264	0.314	0.364	0.414	0.464	0.514	0.564	0.614	0.664	0.714	0.764	0.814	0.864	0.914	0.964	
Avg		1.960	1.910	1.860	1.810	1.760	1.710	1.660	1.610	1.560	1.510	1.460	1.410	1.360	1.310	1.260	1.210	1.160	1.110	1.060	
22A	0.060	0.220	0.270	0.320	0.370	0.420	0.470	0.520	0.570	0.620	0.670	0.720	0.770	0.820	0.870	0.920	0.970	1.020	1.070	1.120	
Avg		1.878	1.828	1.778	1.728	1.678	1.628	1.578	1.528	1.478	1.428	1.378	1.328	1.278	1.228	1.178	1.128	1.078	1.028	0.978	
23A	0.022	0.101	0.151	0.201	0.251	0.301	0.351	0.401	0.451	0.501	0.551	0.601	0.651	0.701	0.751	0.801	0.851	0.901	0.951	1.001	
Avg		2.390	2.340	2.290	2.240	2.190	2.140	2.090	2.040	1.990	1.940	1.890	1.840	1.790	1.740	1.690	1.640	1.590	1.540	1.490	
24A	-0.002	0.568	0.538	0.498	0.478	0.789	0.828	0.888	0.928	0.999	1.028	1.088	1.098	1.138	1.188	1.238	1.298	1.338	1.388	1.438	
Avg		2.325	2.275	2.225	2.175	2.125	2.075	2.025	1.975	1.925	1.875	1.825	1.775	1.725	1.675	1.625	1.575	1.525	1.475	1.425	
25B	-0.032	0.493	0.543	0.593	0.643	0.693	0.743	0.793	0.843	0.893	0.943	0.993	1.043	1.093	1.143	1.193	1.243	1.293	1.343	1.393	
Avg		1.712	1.662	1.612	1.562	1.512	1.462	1.412	1.362	1.312	1.262	1.212	1.162	1.112	1.062	1.012	0.962	0.912	0.862	0.812	
26B	-0.169	0.257	0.307	0.357	0.407	0.457	0.507	0.557	0.607	0.657	0.707	0.757	0.807	0.857	0.907	0.957	1.007	1.057	1.107	1.157	
Avg		2.149	2.099	2.049	1.999	1.949	1.899	1.849	1.799	1.749	1.699	1.649	1.599	1.549	1.499	1.449	1.399	1.349	1.299	1.249	
27A	0.120	0.468	0.518	0.568	0.618	0.668	0.718	0.768	0.818	0.868	0.918	0.968	1.018	1.068	1.118	1.168	1.218	1.268	1.318	1.368	
Avg		2.007	1.957	1.907	1.857	1.807	1.757	1.707	1.657	1.607	1.557	1.507	1.457	1.407	1.357	1.307	1.257	1.207	1.157	1.107	
28C	0.178	0.385	0.435	0.485	0.535	0.585	0.635	0.685	0.735	0.785	0.835	0.885	0.935	0.985	1.035	1.085	1.135	1.185	1.235	1.285	
Avg		2.471	2.421	2.371	2.321	2.271	2.221	2.171	2.121	2.071	2.021	1.971	1.921	1.871	1.821	1.771	1.721	1.671	1.621	1.571	
29C	-0.129	0.542	0.592	0.642	0.692	0.742	0.792	0.842	0.892	0.942	0.992	1.042	1.092	1.142	1.192	1.242	1.292	1.342	1.392	1.442	
Avg		2.073	2.023	1.973	1.923	1.873	1.823	1.773	1.723	1.673	1.623	1.573	1.523	1.473	1.423	1.373	1.323	1.273	1.223	1.173	
30B	0.032	0.304	0.354	0.404	0.454	0.504	0.554	0.604	0.654	0.704	0.754	0.804	0.854	0.904	0.954	1.004	1.054	1.104	1.154	1.204	
Avg		2.011	1.961	1.911	1.861	1.811	1.761	1.711	1.661	1.611	1.561	1.511	1.461	1.411	1.361	1.311	1.261	1.211	1.161	1.111	
31C	-0.174	0.037	0.087	0.137	0.187	0.237	0.287	0.337	0.387	0.437	0.487	0.537	0.587	0.637	0.687	0.737	0.787	0.837	0.887	0.937	
Avg		2.285	2.235	2.185	2.135	2.085	2.035	1.985	1.935	1.885	1.835	1.785	1.735	1.685	1.635	1.585	1.535	1.485	1.435	1.385	
32C	-0.015	0.470	0.520	0.570	0.620	0.670	0.720	0.770	0.820	0.870	0.920	0.970	1.020	1.070	1.120	1.170	1.220	1.270	1.320	1.370	
Avg		2.218	2.168	2.118	2.068	2.018	1.968	1.918	1.868	1.818	1.768	1.718	1.668	1.618	1.568	1.518	1.468	1.418	1.368	1.318	
33C	-0.080	0.338	0.388	0.438	0.488	0.538	0.588	0.638	0.688	0.738	0.788	0.838	0.888	0.938	0.988	1.038	1.088	1.138	1.188	1.238	
Avg		1.755	1.705	1.655	1.605	1.555	1.505	1.455	1.405	1.355	1.305	1.255	1.205	1.155	1.105	1.055	1.005	0.955	0.905	0.855	
34A	-0.209	0.255	0.305	0.355	0.405	0.455	0.505	0.555	0.605	0.655	0.705	0.755	0.805	0.855	0.905	0.955	1.005	1.055	1.105	1.155	
Avg		2.260	2.210	2.160	2.110	2.060	2.010	1.960	1.910	1.860	1.810	1.760	1.710	1.660	1.610	1.560	1.510	1.460	1.410	1.360	
35C	-0.083	0.377	0.427	0.477	0.527	0.577	0.627	0.677	0.727	0.777	0.827	0.877	0.927	0.977	1.027	1.077	1.127	1.177	1.227	1.277	
Avg		2.395	2.345	2.295	2.245	2.195	2.145	2.095	2.045	1.995	1.945	1.895	1.845	1.795	1.745	1.695	1.645	1.595	1.545	1.495	
36B	-0.252	0.384	0.434	0.484	0.534	0.584	0.634	0.684	0.734	0.784	0.834	0.884	0.934	0.984	1.034	1.084	1.134	1.184	1.234	1.284	
Avg		2.249	2.199	2.149	2.099	2.049	1.999	1.949	1.899	1.849	1.799	1.749	1.699	1.649	1.599	1.549	1.499	1.449	1.399	1.349	
37C	0.015	0.463	0.513	0.563	0.613	0.663	0.713	0.763	0.813	0.863	0.913	0.963	1.013	1.063	1.113	1.163	1.213	1.263	1.313	1.363	
Avg		1.841	1.791	1.741	1.691	1.641	1.591	1.541	1.491	1.441	1.391	1.341	1.291	1.241	1.191	1.141	1.091	1.041	0.991	0.941	
38B	0.003	0.044	0.094	0.144	0.194	0.244	0.294	0.344	0.394	0.444	0.494	0.544	0.594	0.644	0.694	0.744	0.794	0.844	0.894	0.944	

F18 B(0)

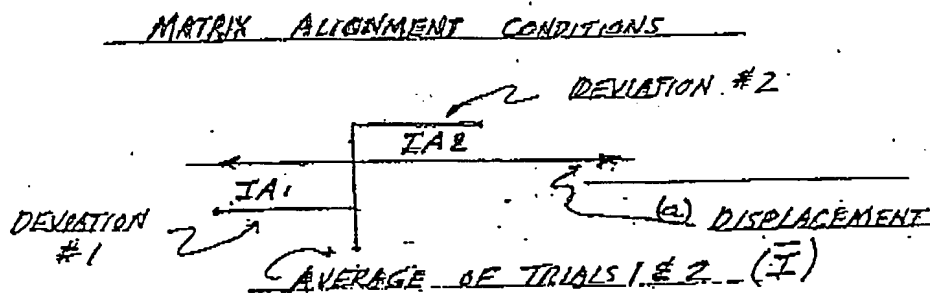
[illegible]

FIG 7 TOPOLOGICAL CHANGE SENSOR (IN EQUILIBRIUM)

FIGURE 8 TABLE OF INITIAL CONDITIONS & INSTRUCTIONS

Initial Conditions - (Iteration Zero)

USE FIGURE 7 AS A TYPOLOGICAL NUMBER ARRAY, WHICH HAS BEEN PLACED IN EQUILIBRIUM BY THE COLUMNS SHIFTING FUNCTIONING OF THE DEVIATIONS SHOWN BELOW (SO AS TO MAKE IT A "CHANGE SENSOR").



NOTE THAT: AVERAGE I = I signal + I average noise

ROW OF MINIMUM ABSOLUTE DEVIATION: I signal = I noise closet to Av noise

AMOUNT OF DEVIATION = |IA| of the \pm polarity

OF EQUIVALENT COLUMN SHIFT = $\frac{|IA|}{\text{min}}$ COLUMN SPACING

To start the iterative process note the entry of the signal-plus-noise in the zero column as the starting reference.

Obtain a numerical match of the entry value in the particular column in the second row which matches that in the 0 column. The column match will occur in either the right or left section.

NOTE: ENTRIES ARE ENTERED IN THE "AVERAGE ROW" COLUMN IN A SEQUENCE OPPOSITE THAT OF THE OTHER ROW

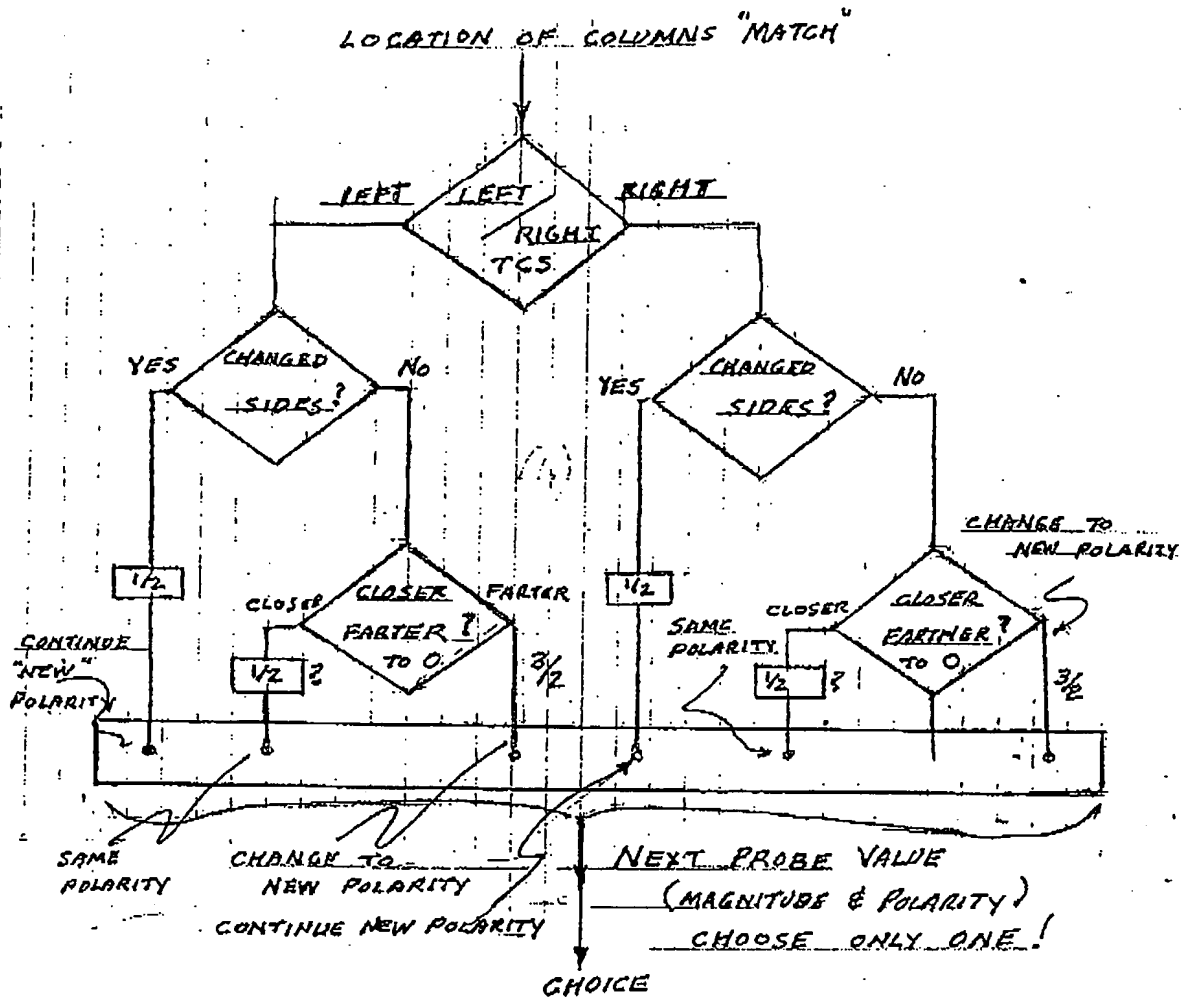


FIG 9 SELECTION LOGIC FOR NEXT ITERATIVE PROBE

The diagram illustrates an iterative process flow:

- ITERATIVE INPUTS (PROBES)**: The starting point of the process.
- ITERATIVE SELECTIVE DECISIONS**: A series of decision points (represented by boxes labeled 1, 2, 3, 4, N-2, N-1, N) that filter or select data.
- ALGEBRAIC SUM OF VALUES**: The result of combining the selected values.
- CONSEQUENCES OF PROBE ITERATIONS**: The outcome of the iterative process, which feeds back into the **ITERATIVE PROCESS**.
- ITERATIVE PROCESS**: The overall loop that repeats the process.
- NOISE ESTIMATE**: A note indicating that the final result is an estimate of noise.

FIG 10. ITERATIVE PROCESS

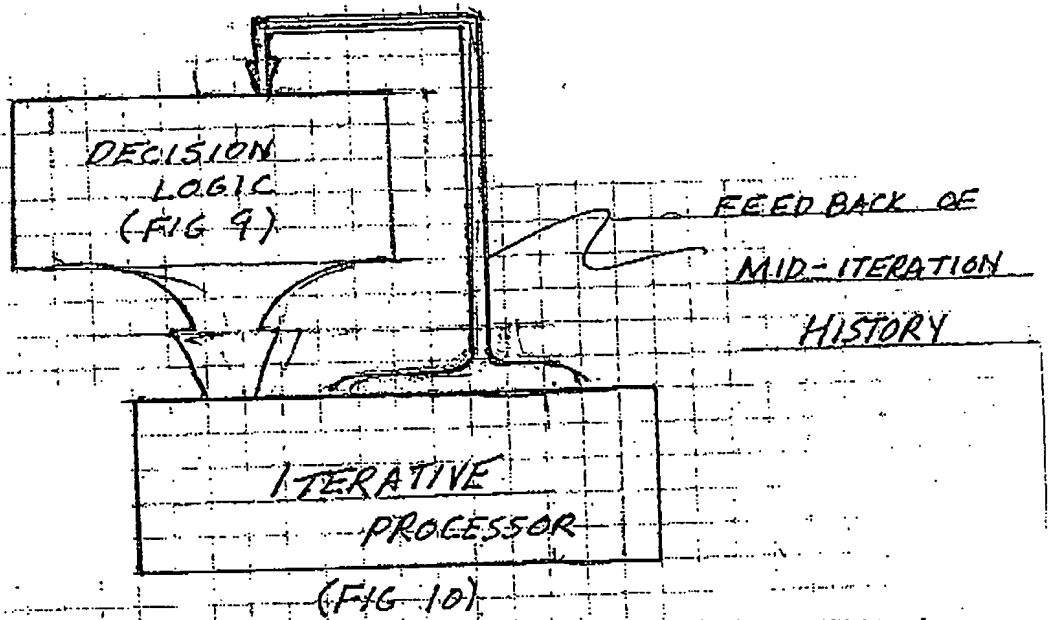


FIG 11 AUGMENTATION OF SELECTION LOGIC

000000 855555960

next to I data

NORTH I data									
Trial Group	Oris Noise SVg	New Noise Model					Eqv. Volts	Last Noise Avg	Ratio Last
		1	2	3	4	5			
205 1	0.1481	0.0666	-0.1314	0.0666	-0.0234	0.0061	-0.1733	-0.0252	2.9
205 2	0.5428	0.3662	0.1165	-0.1336	-0.0068	0.0533	-0.3201	0.0225	24.2
205 3	0.6213	0.5962	0.2502	0.0002	-0.1246	-0.0623	-0.5212	-0.0511	20.0
206	-0.2308	-0.0508	0.1942	-0.0506	0.0742	0.0117	0.2313	-0.0486	12.5
206	0.1813	-0.1142	0.1558	-0.1142	0.0168	-0.0317	0.2017	-0.0295	4.9
206	-0.4060	-0.3165	-0.0665	-0.1832	0.0583	-0.0040	0.4332	0.0272	14.7
207	-0.2893	-0.0300	0.2200	-0.0300	0.0950	0.0265	0.2906	0.0013	226.5
207	-0.2541	0.1262	-0.1232	0.1262	0.0018	-0.0407	0.0276	-0.0293	2.0
207	0.6016	0.3704	0.5404	0.2704	0.1654	0.0224	-0.7300	0.0716	11.2
208	-0.3247	-0.1353	0.1243	-0.1255	-0.0605	0.0153	0.3577	0.0306	10.0
208	-0.5892	-0.4028	-0.2026	0.0472	-0.0778	-0.0153	0.0052	0.0160	50.9
208	-0.5162	-0.3509	-0.1609	0.1471	0.0241	-0.0368	0.3092	-0.0371	72.4
209	-0.3335	-0.2313	0.0105	-0.2315	-0.1065	-0.0406	0.3200	-0.0128	26.1
209	-0.7863	0.6286	0.3766	0.1266	0.0636	-0.0589	-0.6106	-0.0277	20.3
209	-0.5146	-0.1996	0.0504	-0.1996	-0.0746	-0.0121	0.3358	0.0152	16.4
210	-0.4353	-0.2432	0.0000	-0.2432	-0.1182	-0.0557	0.4109	-0.0244	17.9
210	-0.1065	0.1232	-0.1100	0.1332	0.0082	-0.0542	0.0636	-0.0230	4.6
210	0.2597	0.0637	-0.2434	0.0237	-0.0792	-0.0366	-0.2652	-0.0355	46.7
211	-0.3477	-0.0260	-0.2280	-0.0260	0.1035	0.0405	0.2537	0.0093	26.7
211	-0.2273	-0.2126	0.0362	-0.2126	-0.0606	-0.0263	0.2327	0.0047	10.0
211	0.0772	0.3316	0.2496	0.2496	-0.0301	0.0211	-0.0727	0.0005	820.7
212	0.1145	-0.2233	0.0177	-0.2233	-0.1673	-0.0470	-0.1220	-0.0136	8.0
212	0.3209	0.2303	0.0030	-0.2477	-0.1247	-0.0622	-0.3016	-0.0207	10.4
212	0.2595	0.2157	-0.0279	0.2261	0.0971	0.0240	-0.2214	-0.0037	10.2
213	0.4217	0.2624	-0.0312	0.1300	0.0736	0.0112	0.2137	0.0034	123.0
213	-0.5357	-0.3012	-0.0518	0.1222	0.1002	0.0377	0.3008	0.0065	45.0
213	-0.2945	-0.2743	-0.2527	-0.0627	0.1221	0.0596	0.7267	0.0206	24.0
214	-0.6963	-0.5029	-0.2527	-0.0627	0.0766	0.0141	-0.7836	-0.0171	41.7
214	0.7664	0.7016	0.4216	0.2016	0.1031	0.0406	-0.3316	0.0073	26.7
214	0.3609	0.2261	-0.0219	0.2261	0.0455	-0.1332	0.0142	0.0142	42.1
215	-0.5940	-0.3520	-0.1420	0.1030	-0.0170	-0.0544	0.1667	-0.0231	27.6
215	-0.6418	-0.6165	-0.3663	-0.1163	0.0081	-0.0544	0.2100	0.0146	13.6
215	-0.2020	-0.0166	0.2334	-0.0166	0.1084	0.0455	-0.1964	0.0303	7.5
216	0.2267	-0.0009	0.2491	-0.0009	0.1241	0.0616	-0.1784	-0.0415	18.8
216	-0.7669	-0.7607	-0.5107	-0.2607	-0.1357	-0.0732	0.7450	-0.0415	61.7
216	-0.3518	-0.0974	0.1506	-0.0974	0.0256	-0.0367	0.3462	-0.0057	103.9
217	-0.3169	-0.0968	0.1532	-0.0968	0.0253	-0.0343	0.3138	-0.0031	12.3
217	0.3846	0.3126	0.0626	-0.1674	-0.0624	-0.0041	-0.4160	-0.0312	11.8
217	0.3492	0.2517	0.0017	-0.2483	-0.1233	-0.0606	-0.3788	-0.0256	14.8
217	0.2494	0.0254	-0.2246	0.0254	-0.0996	-0.0371	-0.2253	-0.0057	37.2
218	0.2494	0.0254	-0.2246	0.0254	-0.0996	-0.0371	-0.2253	-0.0057	106.0
218	-0.6434	-0.5998	-0.3498	-0.0998	0.2532	-0.0373	0.6373	-0.0061	12.1
218	0.2516	0.1355	-0.1145	0.1355	0.0185	-0.0522	-0.2724	0.0200	41.1
219	-0.6197	-0.5113	-0.2413	-0.1137	0.1137	0.6312	0.6376	-0.0172	10.6
219	-0.1859	0.0141	-0.2459	0.0141	-0.1001	-0.0404	0.1686	-0.0254	7.5
219	-0.2779	-0.1231	0.1264	-0.1231	0.0319	-0.0406	0.2466	-0.0181	12.7
220	-0.2246	-0.0736	0.1749	-0.0736	0.0649	-0.0146	-0.5382	-0.0146	18.6
220	-0.2727	-0.1407	0.0791	-0.1407	0.0649	-0.0146	-0.5382	-0.0146	9.0
220	-0.0834	-0.6404	0.2092	-0.0834	0.0649	-0.0146	0.5382	0.0063	50.6
221	-0.3921	-0.2116	0.0397	-0.2116	0.0649	-0.0146	0.5382	0.0063	13.3
221	0.8987	0.7432	0.4452	0.2662	0.0649	-0.0146	0.5382	0.0063	50.0
221	-0.3558	-0.2370	-0.0676	0.1900	0.0649	-0.0146	0.5382	0.0063	50.0

ORIGINAL
NOISE

RESULT OF EACH OF 1ST
(OF SIX ITERATIONS)

RESIDUAL VOLTAGE
NOISE RATIO

THIS
COLUMN
YIELDS
"ESTIMATE"
NOISE
(SUM OF VALUES)
ADDED

FIG 12 (a)

RAHMAN Q data

trial/ group	Orig Noise Avg	1	2	New Noise Average	4	5	equiv Voltage Added	Last Noise Avg	Ratio Orig to Last
205 1	0.4440	0.3979	0.1479	-0.1030	0.0220	-0.0405	-0.4532	-0.0092	46.1
205 2	0.1928	0.0077	-0.2421	0.0077	-0.1173	-0.0546	-0.2163	-0.0235	8.2
205 3	0.2307	0.0107	-0.2192	0.0307	-0.0942	-0.0216	-0.2313	-0.0004	292.9
206 1	0.6667	0.5547	0.3149	0.0649	-0.0601	0.0024	-0.6955	-0.0289	23.1
206 2	-0.0953	0.1153	-0.1347	0.1153	-0.0037	0.0528	0.1174	0.0215	4.5
206 3	0.0218	-0.2563	-0.0065	0.2435	0.1185	0.0360	0.0020	0.0248	0.9
207 1	0.7412	0.7194	0.4694	0.2194	0.0944	0.0319	-0.7406	0.0006	1181.1
207 2	-0.2973	-0.2522	-0.0022	0.2478	0.1228	0.0603	0.3263	0.0290	10.2
207 3	0.3031	-0.0517	0.1989	-0.0517	0.0732	0.0108	-0.4034	-0.0205	18.7
208 1	0.2199	0.1729	-0.0772	0.1729	0.0478	-0.0147	-0.2033	0.0166	13.3
208 2	0.4198	0.3966	0.1464	-0.1034	0.0216	-0.0409	-0.4295	-0.0097	43.4
208 3	-0.1523	-0.0900	0.1600	-0.0900	0.0350	-0.0275	0.1561	0.0038	40.1
209 1	-0.3053	-0.2665	-0.0185	0.2315	0.1045	0.0440	0.3161	0.0127	23.8
209 2	-0.0802	0.0528	-0.1972	0.0528	-0.0722	-0.0097	0.1024	0.0216	3.7
209 3	-0.0148	0.1185	-0.1113	0.1385	0.0135	-0.0490	-0.0029	-0.0177	0.8
210 1	0.2507	0.1607	-0.0693	0.1607	0.0357	-0.0268	-0.2462	0.0944	56.8
210 2	0.2477	0.2049	-0.0451	0.2049	0.0799	0.0174	-0.2544	-0.0139	17.5
210 3	0.0941	-0.0741	0.1739	-0.0741	0.0489	-0.0134	-0.0784	0.0177	5.4
211 1	0.2259	0.2232	-0.0268	0.2232	0.0982	0.0357	-0.2925	0.0044	53.5
211 2	0.4845	0.2534	0.0034	-0.2464	-0.1216	-0.0591	-0.5143	-0.0278	17.5
211 3	-0.7412	-0.7044	-0.4554	-0.2039	-0.0729	-0.0164	0.7360	0.0146	50.1
212 1	0.5285	0.3926	0.1426	-0.1074	0.0176	-0.0449	-0.5421	-0.0136	38.2
212 2	0.1817	0.0820	-0.1670	0.0820	-0.0430	0.0205	-0.1925	-0.0107	16.9
212 3	-0.0208	0.1420	-0.1080	0.1420	0.0170	-0.0455	0.0666	-0.0142	1.5
213 1	-0.2570	-0.1652	0.0840	-0.1652	-0.0402	0.0223	0.2480	-0.0090	28.7
213 2	-0.0064	0.0210	-0.2190	0.0310	-0.0940	-0.0315	0.0062	-0.0003	24.3
213 3	-0.5094	-0.3206	-0.0700	0.1600	0.0550	-0.0075	0.5333	0.0237	21.5
214 1	-0.0346	0.1703	-0.0797	0.1703	0.0453	-0.0172	0.0287	0.0141	1.3
214 2	-0.1595	-0.0942	0.1506	-0.0942	0.0328	-0.0287	0.1420	0.0025	62.8
214 3	0.1216	-0.0494	0.2004	-0.0494	0.0756	0.0131	-0.1398	-0.0181	4.7
215 1	-0.3403	-0.0218	0.2287	-0.0213	0.1037	0.0412	0.3502	0.0097	54.3
215 2	-0.1557	-0.0243	0.2257	-0.0243	0.1007	0.0382	0.1627	0.0069	22.4
215 3	-0.5943	-0.3037	-0.0537	0.1943	0.0713	0.0080	0.5718	-0.0225	26.5
216 1	0.1584	0.0252	-0.2218	0.0252	-0.0968	-0.0243	-0.1614	-0.0030	52.0
216 2	0.3981	0.3794	0.1274	-0.1206	0.0044	-0.0581	-0.4250	-0.0268	14.0
216 3	0.1159	-0.0841	0.1459	-0.0841	0.0409	-0.0216	-0.1063	0.0097	12.0
217 1	0.4497	0.2497	-0.0003	0.2497	0.1247	0.0622	-0.4188	0.0309	14.5
217 2	0.5273	0.2167	-0.0531	0.2167	0.0919	0.0294	-0.5292	-0.0019	278.7
217 3	0.1066	-0.0700	0.1800	-0.0700	0.0550	-0.0075	-0.0829	0.0238	4.5
218 1	-0.4485	-0.2822	-0.0222	0.2178	0.0928	0.0303	0.4475	-0.0010	453.7
218 2	0.0993	-0.1447	0.1052	-0.1447	-0.0197	0.0428	-0.0867	0.0115	8.5
218 3	0.0171	-0.1190	0.1210	-0.1190	0.0060	-0.0525	-0.0423	-0.0252	0.7
219 1	0.0508	-0.1111	0.1389	-0.1111	0.0139	-0.0486	-0.0681	-0.0173	2.9
219 2	0.2668	0.0668	-0.1844	0.0668	-0.0582	0.0043	-0.2938	-0.0270	9.9
219 3	-0.2772	-0.1891	0.0607	-0.1891	-0.0641	-0.0016	0.3088	0.0296	9.4
220 1	0.6507	0.6075	0.3575	0.1075	-0.0155	0.0470	-0.4349	0.0158	41.2
220 2	0.6374	0.3617	0.1117	-0.1383	-0.0132	0.0492	-0.6157	0.0179	35.4
220 3	-0.1340	0.1746	-0.0754	0.1746	0.0498	-0.0147	0.1545	0.0185	7.2
221 1	-0.3141	-0.1141	0.2257	-0.1141	0.0109	-0.0216	0.2938	-0.0204	15.4
221 2	-0.0350	0.1447	-0.1084	0.1447	0.0197	-0.0428	0.0235	-0.0114	3.0
221 3	0.1025	-0.1367	0.1147	-0.1367	-0.0117	0.0709	-0.0979	0.0174	5.3

12(6)